

# matplotlib 默认参数

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## Contents

在 matplotlib 中, 运行如下代码即可获取全部可自定义参数:

```
1 import matplotlib as mpl
2
3 print(mpl.rcParams())
```

默认参数的设置格式如下:

```
1 import matplotlib as mpl
2
3 mpl.rcParams['figure.figsize'] = (8, 6) # 将画布大小设置为 8*6
```

一共有 304 个参数可设置:

```
1 #! figure
2 figure.dpi: 100.0
3 figure.edgecolor: white
4 figure.facecolor: white
5 figure.figsize: [6.4, 4.8]
6 figure.frameon: True
7 figure.raise_window: True
8 figure.titlesize: large
9 figure.titleweight: normal
10 # ===
```

```
11 figure.autolayout: False
12 figure.constrained_layout.h_pad: 0.04167
13 figure.constrained_layout.hspace: 0.02
14 figure.constrained_layout.use: False
15 figure.constrained_layout.w_pad: 0.04167
16 figure.constrained_layout.wspace: 0.02
17 figure.max_open_warning: 20
18 figure.subplot.bottom: 0.11
19 figure.subplot.hspace: 0.2
20 figure.subplot.left: 0.125
21 figure.subplot.right: 0.9
22 figure.subplot.top: 0.88
23 figure.subplot.wspace: 0.2
24
25
26 #! axes
27 axes.edgecolor: black
28 axes.facecolor: white
29 axes.grid: False
30 axes.grid.axis: both
31 axes.grid.which: major
32 axes.labelcolor: black
33 axes.labelpad: 4.0
34 axes.labelsize: medium
35 axes.labelweight: normal
36 axes.linewidth: 0.8
37 axes.spines.bottom: True
38 axes.spines.left: True
39 axes.spines.right: True
40 axes.spines.top: True
41 axes.titlecolor: auto
42 axes.titlelocation: center
43 axes.titlepad: 6.0
44 axes.titlesize: large
45 axes.titleweight: normal
46 axes.xmargin: 0.05
```

```
47 axes.ymargin: 0.05
48 axes.zmargin: 0.05
49 # ===
50 axes.autolimit_mode: data
51 axes.axisbelow: line
52 axes.formatter.limits: [-5, 6]
53 axes.formatter.min_exponent: 0
54 axes.formatter.offset_threshold: 4
55 axes.formatter.use_locale: False
56 axes.formatter.use_mathtext: False
57 axes.formatter.useoffset: True
58 axes.prop_cycle: cycler('color', ['#1f77b4', '#ff7f0e', '#2ca02c', '#d62728', '#9467bd', '#8c564b', '#e377c2', '#17becf'])
59 axes.title: None
60 axes.unicode_minus: True
61 axes3d.grid: True
62
63 #! xaxis and xtick
64 xaxis.labellocation: center
65 xtick.alignment: center
66 xtick.bottom: True
67 xtick.color: black
68 xtick.direction: out
69 xtick.labelbottom: True
70 xtick.labelcolor: inherit
71 xtick.labelsize: medium
72 xtick.labeltop: False
73 xtick.major.bottom: True
74 xtick.major.pad: 3.5
75 xtick.major.size: 3.5
76 xtick.major.top: True
77 xtick.major.width: 0.8
78 xtick.minor.bottom: True
79 xtick.minor.pad: 3.4
80 xtick.minor.size: 2.0
81 xtick.minor.top: True
82 xtick.minor.visible: False
```



```
119 font.fantasy: ['Chicago', 'Charcoal', 'Impact', 'Western', 'Humor Sans', 'xkcd', 'fantasy']
120 font.stretch: normal
121 font.variant: normal
122
123
124 #! grid
125 grid.alpha: 1.0
126 grid.color: #b0b0b0
127 grid.linestyle: -
128 grid.linewidth: 0.8
129
130
131 #! legend
132 legend.loc: best # 图例位置
133 legend.frameon: True # 显示边框
134 legend.framealpha: 0.8 # 边框透明度
135 legend.edgecolor: 0.8 # 边框颜色
136 legend.facecolor: inherit # 背景颜色
137 legend.title_fontsize: None # 图例标题的字体大小
138 legend.borderpad: 0.4 # 边框偏离
139 legend.columnspacing: 2.0 # 列间隔
140 legend.fontsize: medium # 图例字体大小
141 legend.labelcolor: None # 图例标签颜色
142 legend.labelspacing: 0.5 # 图例和标签间隔
143 legend.fancybox: True # 边框阴影
144 #===
145 legend.borderaxespad: 0.5
146 legend.handleheight: 0.7
147 legend.handlelength: 2.0
148 legend.handletextpad: 0.8
149 legend.markerscale: 1.0
150 legend.numpoints: 1
151 legend.scatterpoints: 1
152 legend.shadow: False
153
154
```

```

155 #! savefig
156 savefig.bbox: None
157 savefig.directory: ~
158 savefig.dpi: figure
159 savefig.edgecolor: auto
160 savefig.facecolor: auto
161 savefig.format: png
162 savefig.orientation: portrait
163 savefig.pad_inches: 0.1
164 savefig.transparent: False
165
166
167 #!=====
168
169 #! lines
170 lines.linestyle: - # 样式
171 lines.linewidth: 1.5 # 宽度
172 lines.color: C0 # 颜色
173 lines.dashdot_pattern: [6.4, 1.6, 1.0, 1.6] # dashdot 样式
174 lines.dashed_pattern: [3.7, 1.6] # dashed 样式
175 lines.dotted_pattern: [1.0, 1.65] # dotted 样式
176 lines.marker: None
177 lines.markersize: 6.0 # 线上样本点大小
178 lines.markeredgecolor: auto # 线上样本点边缘颜色
179 lines.markeredgewidth: 1.0 # 线上样本点边框宽度
180 lines.markerfacecolor: auto # 线上样本点背景色
181 lines.scale_dashes: True
182 #===
183 lines.antialiased: True
184 lines.dash_capstyle: butt
185 lines.dash_joinstyle: round
186 lines.solid_capstyle: projecting
187 lines.solid_joinstyle: round
188
189 #! markers
190 markers.fillstyle: full

```

```

191
192 #! scatter
193 scatter.edgecolors: face
194 scatter.marker: o
195
196 #! contour
197 contour.corner_mask: True
198 contour.linewidth: None
199 contour.negative_linestyle: dashed
200
201 #! text
202 text.color: black # 字体颜色
203 text.usetex: False # 是否使用 latex
204 text.latex.preamble: # 字体 latex 导言区
205 text.hinting: force_autohint # 字体微调
206 #===
207 text.antialiased: True
208 text.hinting_factor: 8
209 text.kerning_factor: 0
210
211
212 #! mathtext
213 mathtext.default: it # 默认字体样式
214 mathtext.fontset: dejavusans # 字体种类
215 mathtext.it: sans:italic
216 mathtext.rm: sans
217 mathtext.sf: sans
218 mathtext.tt: monospace
219 mathtext.bf: sans:bold # 粗体
220 mathtext.cal: cursive # 计算符号, 草书
221 mathtext.fallback: cm
222
223
224 #! boxplot
225 boxplot.bootstrap: None
226 boxplot.boxprops.color: black

```

```
227 boxplot.boxprops.linestyle: -
228 boxplot.boxprops.linewidth: 1.0
229 boxplot.capprops.color: black
230 boxplot.capprops.linestyle: -
231 boxplot.capprops.linewidth: 1.0
232 boxplot.flierprops.color: black
233 boxplot.flierprops.linestyle: none
234 boxplot.flierprops.linewidth: 1.0
235 boxplot.flierprops.marker: o
236 boxplot.flierprops.markeredgecolor: black
237 boxplot.flierprops.markeredgewidth: 1.0
238 boxplot.flierprops.markerfacecolor: none
239 boxplot.flierprops.markersize: 6.0
240 boxplot.meanline: False
241 boxplot.meanprops.color: C2
242 boxplot.meanprops.linestyle: --
243 boxplot.meanprops.linewidth: 1.0
244 boxplot.meanprops.marker: ^
245 boxplot.meanprops.markeredgecolor: C2
246 boxplot.meanprops.markerfacecolor: C2
247 boxplot.meanprops.markersize: 6.0
248 boxplot.medianprops.color: C1
249 boxplot.medianprops.linestyle: -
250 boxplot.medianprops.linewidth: 1.0
251 boxplot.notch: False
252 boxplot.patchartist: False
253 boxplot.showbox: True
254 boxplot.showcaps: True
255 boxplot.showfliers: True
256 boxplot.showmeans: False
257 boxplot.vertical: True
258 boxplot.whiskerprops.color: black
259 boxplot.whiskerprops.linestyle: -
260 boxplot.whiskerprops.linewidth: 1.0
261 boxplot.whiskers: 1.5
262
```



```

263
264
265 #! ===== Other
266 _internal.classic_mode: False
267 agg.path.chunksize: 0
268 animation.bitrate: -1
269 animation.codec: h264
270 animation.convert_args: []
271 animation.convert_path: convert
272 animation.embed_limit: 20.0
273 animation.ffmpeg_args: []
274 animation.ffmpeg_path: ffmpeg
275 animation.frame_format: png
276 animation.html: none
277 animation.writer: ffmpeg
278 #! backend
279 backend: module://matplotlib_inline.backend_inline
280 backend_fallback: True
281 #! date
282 date.autoformatter.day: %Y-%m-%d
283 date.autoformatter.hour: %m-%d %H
284 date.autoformatter.microsecond: %M:%S.%f
285 date.autoformatter.minute: %d %H:%M
286 date.autoformatter.month: %Y-%m
287 date.autoformatter.second: %H:%M:%S
288 date.autoformatter.year: %Y
289 date.converter: auto
290 date.epoch: 1970-01-01T00:00:00
291 date.interval_multiples: True
292 #!
293 docstring.hardcopy: False
294 #!
295 errorbar.capsize: 0.0
296 #! hist
297 hist.bins: 10
298 #! image

```

```
299 image.aspect: equal
300 image.cmap: viridis
301 image.composite_image: True
302 image.interpolation: antialiased
303 image.lut: 256
304 image.origin: upper
305 image.resample: True
306 #! interactive
307 interactive: False
308 #! keymap
309 keymap.back: ['left', 'c', 'backspace', 'MouseButton.BACK']
310 keymap.copy: ['ctrl+c', 'cmd+c']
311 keymap.forward: ['right', 'v', 'MouseButton.FORWARD']
312 keymap.fullscreen: ['f', 'ctrl+f']
313 keymap.grid: ['g']
314 keymap.grid_minor: ['G']
315 keymap.help: ['f1']
316 keymap.home: ['h', 'r', 'home']
317 keymap.pan: ['p']
318 keymap.quit: ['ctrl+w', 'cmd+w', 'q']
319 keymap.quit_all: []
320 keymap.save: ['s', 'ctrl+s']
321 keymap.xscale: ['k', 'L']
322 keymap.yscale: ['l']
323 keymap.zoom: ['o']
324 #! polaraxes
325 polaraxes.grid: True
326 #! ps
327 ps.distiller.res: 6000
328 ps.fonttype: 3
329 ps.papersize: letter
330 ps.useafm: False
331 ps.usedistiller: None
332 #! svg
333 svg.fonttype: path
334 svg.hashsalt: None
```

```
335 svg.image_inline: True
336 #! timezone
337 timezone: UTC
338 tk.window_focus: False
339 #! toolbar
340 toolbar: toolbar2
341 #! webagg
342 webagg.address: 127.0.0.1
343 webagg.open_in_browser: True
344 webagg.port: 8988
345 webagg.port_retries: 50
346 #! hatch
347 hatch.color: black
348 hatch.linewidth: 1.0
```